

6-1297

No. 1—UNHEATED KEROSENE WILL NOT GIVE OFF flammable vapors, as Stanley Fulkerson shows an audience in his unique fire prevention demonstration, and no flames result as a match is held above a container of the liquid. However, when the kerosene is heated on the hot place shown below it will give off vapors that will ignite when exposed to the match. No. 2—Just two drops of gasoline are exploded when exposed to heat in the form of a spark in a tube that sends a cork sailing through the air. However, a too rich mixture will not burn or explode. No. 3—How gasoline fumes, heavier than air, descend in a trough to become

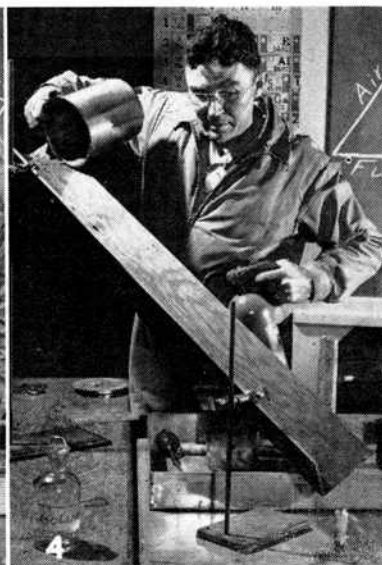


6-1294



6-1296

ignited from the candle and then fly back up the trough to set on fire a bit of absorbent cotton soaked in gasoline is shown here to demonstrate how heavy vapors seek their level. No. 4—How a fire is smothered by carbon dioxide gas from a fire extinguisher is shown here. The "bucket of nothing" but really containing carbon dioxide is poured into the trough and descends to wipe the lighter air from the candle, thus putting out the fire. In the lower picture Fulkerson is shown presenting his demonstration to members of the Y-12 Fire Department and Chemical Department.



6-1295 Y-12 Photos By Vince Moore

Dept. 2077 Sets 'All Present' Record Again

Returning to the perfect attendance bracket again, Dept. 2077, Electrical Maintenance, continued its excellent record in the Major League of departments of more than 50 employees scheduled by posting the perfect mark for the week ending March 26. The department recorded a similar record just four weeks previously, for the week ending February 26.

During the past 24 weeks Electrical Maintenance has reported the best attendance mark in the Major League in 16 of those periods and in 11 instances has had an "all present" mark. On one occasion the department operated for five consecutive weeks with an absence. Chemical Record Also Fine

In the week ending March 26 the Chemical Department maintained its own fine record and second place in the Major League. This department has been in second place for five out of the past six weeks and on the other occasion was in first place with a perfect attendance mark. Its latest absentee mark was .6 per cent.

Third place in the Major League for the week ending March 26 went to Field Maintenance, which reported 1.1 per cent of its personnel absent for the period.

In addition to Electrical Maintenance, eight departments in the Minor League of departments with from 15 to 49 employees scheduled also reported "all present" marks for the week ending March 26. The Minor League had seven departments in the perfect bracket the previous week.

Four Repeaters Are Listed

Of the eight Minor League departments with full attendance four were repeaters from the previous week. These four were Maintenance Utilities, Property, Employee Relations and the Laundry.

The other four departments in the eight-way tie for top position in the Minor League were Transportation, Cafeteria and Canteens, Uranium Control and Computing and Manufacturing Offices. These departments advanced from fourth, fifth, sixth and seventh places held during the week ending March 19.

The Janitors, one of the first place departments for the week ending March 19, dropped back to second place the next week with an absentee record of .6 per cent. The Technical Service Laboratory held its third place spot for the

ISOTOPES PROTECT ORANGES

University of Pittsburgh scientists have reported to the American Association for Advancement of Science that experiments with radioactive sprays for orange groves have shown that minute amounts of radioactive phosphorus greatly retarded two types of mold.

SAFETY SCOREBOARD

Your Plant Has
Operated
285 DAYS
Without A Lost Time
Accident
THROUGH APRIL 2

Fulkerson's 'Rube Goldberg' Show Boosts Fire Prevention Interest

The record itself speaks for the efficiency of the fire prevention and safety programs in Y-12—programs that include instruction over a wide field in how to make the plant a safer place in which to work.

Both fire prevention and safety programs include various visual demonstrations to bring home points—and recently Stanley Fulkerson, of the Materials Laboratory of the Isotope Research and Production Department, has worked out an approach of his own to point out the basic causes of fires principally originating from volatile liquids and gases, and what happens in extinguishing such fires.

AEC Urges Secrecy On Thermonuclears

In connection with its current policy relative to release of information concerning thermonuclear weapons, the Atomic Energy Commission has issued an announcement that all Y-12ers are urged to read and comply with. The AEC announcement said:

"The assistance and cooperation of all employees of the commission and contractors and all commission consultants is requested in seeking to avoid the release of technical information on thermonuclear weapons by persons closely associated with the atomic energy project. The purpose of the commission's request on this matter is for the time being to avoid release of technical information, which even although itself unclassified, may be interpreted by virtue of the project connection of the speaker as reflecting the commission's program with respect to thermonuclear weapons. This, of course, applies only to technical information and conclusions based thereon. We are confident that project connected personnel are aware of their responsibility and duty not to add or elaborate or confirm information concerning the super-bomb or the thermonuclear reaction if such action expands the known technical knowledge of this weapon. This would still permit unclassified discussions of what might be called the classified thermonuclear reactions as long as there is no reference to their relation to weapons."

MUSTARD GAS BLAMED

In a recent address at Syracuse, N. Y., James R. Young, former war correspondent, is quoted in a newspaper story as saying that mustard gas manufactured at Hiroshima, Japan, and not the atomic bomb, caused burns and nausea among the Japanese when the bomb dropped. Young contended that Hiroshima was not a peaceful city but a prime military target.

Demonstration Is Endorsed

Although not an actual part of the fire prevention program of the plant, Fulkerson's ideas and demonstrations have been endorsed by fire prevention and safety authorities in Y-12 and Fulkerson already has presented his demonstration and fire prevention talk, requiring about 30 minutes to complete, at seven different fire prevention and safety meetings in the plant. At

(Continued on Page 2)

Notre Dame Professor Named To Lead Seminar Discussions

Prof. D. L. Falkoff, of the University of Notre Dame, will lead the discussion at the weekly meeting of the Oak Ridge Physics Seminar at 4 o'clock Friday afternoon, April 7. The seminar session will be held in the East Lounge of the Ridge Recreation Hall.

The subject of the session this week is "Recent Developments in Nuclear Angular Correlation." Scientific and technical personnel of Y-12 interested in the topic are urged to attend the meeting.

Lilienthal Denies World 'On Brink'

In the farewell reception in his honor, David E. Lilienthal, former chairman of the Atomic Energy Commission, told AEC personnel that the world is not on the brink of atomic "cataclysm and destruction in war," according to the Washington Post. The former AEC chairman praised persons in government service and maintained that they should realize what an honor it is to be engaged in such work since this country is truly the "last great bastion of freedom in the world."



6-1292

Print Contest Featuring Animals Tops Camera Club Meet Program

A black and white print photographic contest on the subject of animals will feature the April meeting of the Carbide Camera Club to be held at 7:30 o'clock next Tuesday night, April 11. The meeting will be held in the Camera Club headquarters in the Y-12 East Portal building.

Deadline for entering prints in the contest will be Friday, April 7. Entries may be left at the home of Nat Stetson, of Y-12 and president of the club, who lives at 105 West Magnolia Lane; S. A. Hluchan, vice president, 108 Darwin Lane; or Nelson Van Wie, club secretary, 102 East Maiden Lane.

Vince Moore, of the Y-12 photographic section, will judge the prints.

In addition to the contest Frank Gordon, of Y-12, will give a talk on types of electronic timers suitable for photography. Hluchan will describe agitation systems for use in processing pictures. James Dalton, of K-25, will present a strip film by the duPont company showing how film is manufactured.

Controls Devised For 'Hot' Reactors

Control devices have been developed to prevent disastrous atomic explosions in "hot" nuclear reactors, Dr. J. M. Harrer, of the Argonne National Laboratory of the Atomic Energy Commission is reported by the New York Times as having told a meeting of the American Institute of Electrical Engineers recently. Dr. Harrer cited the fact that such explosions proceed with tremendous speed when once started.

'Chemistry, Pottery Making' Subject Of Radio Program

"Chemistry and Pottery Making" will be the principal topic of discussion on the weekly radio program "Headlines in Chemistry" to be given at 8:15 o'clock Sunday night, April 9, over Oak Ridge Station WATO.

Warren Risen, of K-25, as host during the program, will interview Murray Schwartz, of Fairchild, on the principal topic. As reporter on the program C. W. D. Thornton, of the Atomic Energy Commission, will present news items of interest in science in non-technical and entertaining form.

"Headlines in Chemistry" is presented every Sunday night over WATO under auspices of the East Tennessee Section of the American Chemical Society.

ATOMIC MEDICINE TAUGHT

The Philadelphia Inquirer has reported that the first course in atomic medicine to be given in a medical school has been started at the Jefferson Medical College in Philadelphia. The course is offered in cooperation with the office of the Surgeon General of the Army and the first lecture was given by Col. James P. Cooney, now assigned to the Atomic Energy Commission.

Y-12 Bulletin

Published Weekly By
CARBIDE AND CARBON
CHEMICALS DIVISION,
Union Carbide And Carbon
Corporation
Post Office Box P

Oak Ridge Tenn.

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North Portal, Bldg. 9701-1
Telephone 7-8252

Electricians Report 'All Present' Again

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second week in a row and reported .9 per cent absenteeism.

The plant-wide absentee record for the week ending March 26 was an even three per cent, the same as the preceding week. The record, by departments, follows:

MAJOR LEAGUE			
Dept.	Percentage Absent	3-26-50	3-19-50
2077	0.0	1	3
2619	0.6	2	2
2015	1.1	3	5
2360	1.3	4	4
2014	1.4	5	1
2283	3.2	6	7
2300	3.8	7	12
2003	4.57	8	6
2616	4.60	9	8
2091	6.1	10	10
2320	6.2	11	13
2142	6.3	12	9
2282	7.1	13	11

Group absentee percentage was 3.6 per cent, .2 per cent higher than the preceding week.

MINOR LEAGUE			
Dept.	Percentage Absent	3-26-50	3-19-50
2005	0.0	1	1
2140	0.0	1	1
2109	0.0	1	1
2096	0.0	1	1
2008	0.0	1	4
2107	0.0	1	5
2739	0.0	1	6
2133	0.0	1	7
2001	0.6	2	1
2270	0.9	3	3
2743	1.0	4	1
2060	1.8	5	2
2143	2.5	6	1
2002	3.2	7	8
2009	4.3	8	10
2200	5.5	8	9
2090	6.8	10	11

Group absentee percentage was 1.4 per cent, .5 per cent lower than the preceding week.

The plant average for the week ending March 26 was three per cent, remaining the same as the preceding week.

Public Is Urged To Study Atomics

Despite the restrictions on information of use of atomic energy for military purposes there is a huge amount of atomic energy information pertaining to non-military uses that has been released and published, it is pointed out by Morse Salisbury, director of technical and public information for the Atomic Energy Commission. According to Salisbury, in an address at Drake University, it is the responsibility of Americans to study such released information.

TRACER AID SEEN

The Detroit News reports that Dr. Gerald Wendt, scientist, in speaking at a Farmers' Week audience at the Michigan State College at Lansing, reported that by using radioactive carbon as a tracer element it may be possible to learn how nature builds plant materials and thereby vastly increase agricultural production.



Two Y-12 employees became fathers of babies born last week at the Oak Ridge Hospital. They were George F. Wells and Mrs. Wells, girl, born March 28; and Frank Scheitlin and Mrs. Scheitlin, girl, born March 28.

Courtship is that period which a girl decides whether or not she can do any better.



SPEAKING OF LARGE FAMILIES, C. M. MOSES, OF THE Y-12 Product Chemical Department, is proud of his many brothers and sisters, also nieces and nephews. This picture was taken at a recent family reunion with the Y-12er shown directly behind his mother, at right of front row. All the rest are brothers and sisters. There are 12 living children in the Moses family and 29 grandchildren.



Last Friday Old Man March was trying to march out of the picture in a lamb-like manner—after cavorting for most of his 31 days in a very leonine fashion. In fact, most of the March weather could no more be compared to the youthful sheep than Peter Cottontail could be rated with Bugs Bunny, the wascally wabbit.

Electrical Maintenance seems bound to get into the news one way or another . . . After turning in another perfect weekly attendance record the electricians are congratulating Evan Means over being named director of the Oak Ridge Community Playhouse . . . He succeeds Charles A. Keller, resigned, who has left Oak Ridge. For years now Means has been stage manager of the Playhouse productions and in this difficult capacity has contributed greatly to the high quality of the shows presented by the amateur thespians . . . The department reports U. L. Alsbaugh spent a recent week end over in Robertsville, Nawth C'lina.

J. T. Thomas, of Field Maintenance, is being extended get well wishes by Field Maintenance . . . R. B. Amos vacationed last week at his home in Oak Ridge.

Just when it seemed that the Mule Train had delivered its last "gittar" and passed to a well-deserved demise—up comes that 'tater-cookin' radio man in Knoxville with a brand new version, in a Chinese locale yet, and by (believe it or not) Spike Jones and his fellow conspirators against the peace and quiet of the community. The record really is one of Spike's better jobs.

George Wells, of Isotope Research and Production, and Mrs. Wells are receiving departmental congratulations over the birth of a daughter in the Oak Ridge Hospital March 28. Little Linda Carolyn weighed in at eight pounds and 12 ounces and all concerned are doing nicely.

Mozelle Rankin, of the Electromagnetic Research Laboratory, has returned from Charleston, S. C., where she visited the famous and lovely Azalea Gardens when they were in full bloom—one of the prettiest sights anywhere. She also got her first view of the Atlantic Ocean.

The Stores Department welcomes Jack Garland back after a brief illness, part of the time being spent in the Oak Ridge Hospital . . . G. H. Booth spent the past week end visiting his brothers over in neighboring Rockwood . . . The department sincerely is hoping W. D. Hill soon will lick that attack of illness and be back on the job . . . That old fisherman J. D. McGuffin, comes back with a report of good fishing at Cherokee Lake where he and his party caught their limit on a recent visit.

The next person who sticks his or her head in The Bulletin office, and remarks, "Real short summer we had, ain't it," is going to be crowned—and not Queen of Next Month. Why do these wisecracks always

pick on us? That also goes for the latest offers of Ingrid Bergman jokes.

Receiving and Shipping tells us that P. H. Redmon spent a recent one-week vacation at his home in Wartburg, Tenn.

Irene Turner, of Manufacturing Offices, claims the fishing championship of the Turner family over a recent week end up at Douglas Lake. She and her husband, a K-25 gent, motored over to the lake and he—caught nothing. She claims the title on—one fish.

Buildings and Grounds extends sympathy to W. B. Eisenhower over the recent death of his brother March 27 in Newport, Tenn.

The bells were ringing down in Assay Laboratory last week for Belle Thompson, who had returned to work after a brief illness . . . Mona Blake Rollins and her new husband, Tom, are the envy of the department as they are spending a two-week vacation honeymooning down in Sarasota, Fla. . . What's and where's better? Best of luck, folks.

T. A. McKenzie, superintendent of the Plant Protection Department; and Bill Hays, of the Security Office, were on the ailing list all last week. Their Portal neighbors hope they will be back at their desks this week.

Marilyn Gordon, of the Uranium Control and Computing Department, is back after vacationing up in Connecticut and New York City . . . Gwinn Harmon and her husband went over to Fayetteville, N.C., visiting her folks over the past week end . . . Hallie Leicht and her husband made a recent visit over to Bowling Green, Ky. . . and that's a nice town, too.

A movie cowboy who also sings in the saddle once was entertaining some young fry in a personal appearance when he was tossed to the ground by his nag. As the actor was emerging from the resulting temporary coma he heard one of the young critics tell another, "He don't sing so good, either."

"That's all, brother."



The following Y-12 employees were patients in the Oak Ridge Hospital last week: Claborn C. Neeley, Product Chemical; Walter D. Hill, Stores; Jack W. Garland, Stores; and Daisy Whitehead, Medical.

DISASTER CLASS TRAINING

Recent news stories have reported that the University of California, Berkeley, Cal., has instituted a class in atomic disaster control. The enrollment in the first class consists of 27 army officers, ranging from colonels to lieutenants, and one public health expert.

Fulkerson's 'Rube Goldberg' Show Boosts Fire Prevention Interest

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the conclusion of each talk, employees attending the session have described the demonstration as both instructive and interesting in the unique presentation of the subject.

Fulkerson says the general idea of the demonstration is not new in the petroleum products and chemical products field, as similar visual "shows" have been presented at meetings of the National Safety Congress as far back as 1937. The Y-12 man developed his version of the demonstration while serving as chairman of the fire prevention and safety committee of his department some time ago and first presented it to the Materials Laboratory personnel. He used odds and ends of equipment and material around the laboratory in assembling the gadgets needed to put over the demonstration.

Three Factors Are Needed

The entire demonstration is based on the premise that three factors are necessary to produce a fire. They are air, heat and fuel in vapor form. Using a triangle with these factors as sides as an example Fulkerson goes on to show through operation of his gadgets that all three of them must be combined before fire occurs.

When first set up, Fulkerson's demonstration equipment looks somewhat like a Rube Goldberg contraption—but soon after he begins to explain what it is all about the simple purpose of each gadget is clearly brought out.

For instance, at the beginning of the demonstration he shows how kerosene, when cold, does not emit the necessary vapor to result in fire, even when a match is held over a container of the liquid. Then the kerosene is heated over a hot plate and vapor is produced that will burn when exposed to air and heat—the match in this instance.

Pop Goes The Howitzer

Then Fulkerson shows how gasoline will give off flammable vapors without being heated. However, he points out, when these vapors are mixed in the proper proportions with air they will burn with explosive violence when exposed to heat. In this phase Fulkerson puts two drops of gasoline in a tube looking something like a howitzer, places a cork in the top and then provides a spark of heat by means of a spark plug inserted in the side of the tube. The resultant tiny explosion pops the cork out of the top gadget—usually with accompanying ohs and ahs of the audience.

Later Fulkerson puts a much larger amount of gasoline in the tube and demonstrates that a mixture too rich in fuel vapor will neither explode nor burn—as exactly nothing happens after the tube is given its overdose of gasoline and the spark applied to the mixture—usually to the disappointment of the spectators who look for a bigger blast and trajectory of the cork.

Vapor Seeks Own Level

Going on to show how some burnable vapors are heavier than air and will seek a natural level, as does water, Fulkerson has constructed an ordinary-appearing wooden trough with metal supports holding it at an angle. First a bit of absorbent cotton is soaked with gasoline and placed at the top of the trough. At the bottom is a candle. For a moment after the soaked cotton is placed at the top, nothing happens. However, the invisible vapor descends in the trough, is ignited by a candle at the foot and the burning vapor flies back up the trough to set the cotton on fire.

In conclusion Fulkerson shows the principles of the CO-2 fire extinguisher that uses carbon dioxide gas to smother flames. The candle at the foot of the trough is lit. Then the demonstrator pumps some carbon dioxide gas into an empty bucket-type of container. Then, apparently after pouring a bucket "full of nothing" into the trough, the lighted candle at the bottom is extinguished by the descending gas.

This phase of the demonstration vividly shows how fire cannot be maintained when one of the vital

factor—air—is removed. The carbon dioxide gas actually brushes the lighter air to one side as it descends on the burning candle.

Keep Third Side In Mind

In summing up his dissertations, Fulkerson reminds his listeners:

"Now we should know a great deal more about the actual hazards relative to fires and explosions. By way of prevention we have learned that when it is necessary in our work to deal with fuel vapor, air and heat, that we can have any two sides of the triangle present at one time and still be on the safe side. However, we must constantly keep in mind that when the third side of the triangle comes into play we are going to have a fire—and possibly explosion—whether we want it or not."

"Once a fire gets started and has to be controlled, just remember the triangle again. Take any one of the sides away and there is no fire left. If it is most convenient to exclude air from the fire it goes out, and is said to have been smothered. Sometimes it is more convenient to remove the fuel from the fire such as draining liquid fuel from a container and pumping it into another container some distance away. This is known as starving a fire."

Fulkerson's demonstration has been praised by Y-12 Fire Chief John W. Hughey, Dr. C. P. Keim, Superintendent of the Isotope Research and Production Department and by Paul Hagelston, head of the Materials Laboratory. They point out that the demonstration brings out not only that fires do happen only when certain factors are combined, but just why they happen. The principal lesson of the Fulkerson demonstration, it is declared, is to stimulate more thought and care in the handling of volatile liquids and gases in Y-12 operations—and to be certain that the triangular combination of air, heat and fuel is avoided when such material is being used.

Edgemoor Bridge Will Close Week Days During Repairs

Y-12 motorists who have been using the Edgemoor Bridge route between Oak Ridge and Knoxville again are reminded that the span will be closed for repairs during most of the daytime on week days, beginning next Monday, April 10.

Anderson County officials have notified the Atomic Energy Commission that the repair work will require about one month. During that period, the bridge will be closed to traffic daily, Monday through Saturday, from 7:45 a.m. to 4:45 p.m. The span will be open to traffic at other periods during week days and all day on Sundays.

HIGH SCHOOL BAND SETS CONCERT TO RAISE FUNDS FOR TRIP TO MEMPHIS

The fine Oak Ridge High School band is just itching to go to Memphis April 27 and 28 to participate in the state high school band festival—but the trip will cost quite a bit of money, of which the band hasn't got much.

So the band is giving a benefit performance at 8 o'clock tonight, Wednesday, April 5, in an effort to raise some of the needed funds. No admission will be charged, but contributions to the travel fund will be accepted from members of the audience at the high school auditorium.

There are nine Y-12 families represented in the band membership and all the youthful musicians and their folks hope the Memphis trip can be made. The Oak Ridge band recently took a host of honors in competition in Knoxville recently and believe that they can make an excellent showing in the Memphis festival.

PLANT BOWLING TOURNAMENT OPENS SATURDAY

20 Teams To Compete For Honors; Handsome Trophies Go To Winners

Most of the bowlers in Y-12 who have competed in various league competitions during the present season and some who have not found time to roll regularly will be out there firing Saturday and Sunday on the Oak Terrace alleys in the annual plant pin tournament. The keggers will be shooting for 36 handsome trophies offered by the Com-

Y-12 Bowling Tournament Schedule

The complete schedule for the Y-12 men's plant bowling tournament, as drawn up by the Recreation Office, follows:

Saturday, April 8

1 p.m., Alleys 7 and 8, Hornets, Orphans.
1 p.m., Alleys 9 and 10, Materializers, Misfits.
5:30 p.m., Alleys 3 and 4, Angstroms, One-91.
5:30 Alleys 5 and 6, Guards, Bumpers.
5:30 p.m., Alleys 7 and 8, Termites, Rippers.
5:30 p.m., Alleys 9 and 10, Comets, Strikers.
8 p.m., Alleys 3 and 4, Maintenance, Tigers.
8 p.m., Alleys 5 and 6, Mules, Bums.
8 p.m., Alleys 7 and 8, All Stars, Short Circuits.

Sunday, April 9

12 noon, Alleys 3 and 4, doubles, Frazier and Rathkamp, Brothers and Knox.
1 p.m., Alleys 5 and 6, singles, Frazier, Knox.
3 p.m., Alleys 3 and 4, doubles, Burns and Kappelmann, Dunlap and Riddle.
3 p.m., Alleys 5 and 6, doubles, Crews and Moody.
3 p.m., Alleys 7 and 8, doubles, Tiller and Hubbard, Fultz and Whitaker.
3 p.m., Alleys 9 and 10, doubles, Petretzky and Brisco, Morgan and Barker.
4 p.m., Alleys 3 and 4, singles, Petretzky, Brisco, Barker, Savage.
4 p.m., Alleys 5 and 6, singles, Burns, Kappelmann, Dunlap, Riddle.
4 p.m., Alleys 7 and 8, singles, Crews, Moody, Tunnell, Reece.
4 p.m., Alleys 9 and 10, singles, Hubbard, Tiller, Fultz, Whitaker.
5 p.m., Alleys 3 and 4, doubles, Caldwell and Ratjen, Cobble and Sherrod.
5 p.m., Alleys 5 and 6, doubles, C. Roberts and Gragg, Tunnell and Savage.
5 p.m., Alleys 7 and 8, doubles, McGill and Thurman, Francis and Grifton.
5 p.m., Alleys 9 and 10, doubles, E. Green and Galloway, Helton and Hendricks.
6 p.m., Alleys 3 and 4, singles, E. Green, Galloway, Helton, Hendricks.
6 p.m., Alleys 5 and 6, singles, Caldwell, Ratjen, Cobble, Sherrod.
6 p.m., Alleys 7 and 8, singles, C. Roberts, Gragg, Schaefer, Allstun.
6 p.m., Alleys 9 and 10, singles, McGill, Thurman, Francis, Kennedy.
7 p.m., Alleys 3 and 4, doubles, Schaefer and Allstun, Crouse and Schmitt.
7 p.m., Alleys 5 and 6, doubles, Webber and Gordon, Ward and Musser.
7 p.m., Alleys 7 and 8, doubles, Kendig and Martin, C. Greene and Bailis.
7 p.m., Alleys 9 and 10, doubles, Tibbatts and Holtzknecht, Groppe and Koons.
8 p.m., Alleys 3 and 4, singles, Tibbatts, Holtzknecht, Groppe, Koons.
8 p.m., Alleys 5 and 6, singles, Crouse, Schmitt, Pletz, R. Roberts.
8 p.m., Alleys 7 and 8, singles, Webber, Gordon, Ward, Musser.
8 p.m., Alleys 9 and 10, singles, Kendig, Martin, C. Greene, Bailis.
9 p.m., Alleys 5 and 6, doubles, Spitzer and Griffin.
9 p.m., Alleys 7 and 8, singles, Scott, Gillihan.
9 p.m., Alleys 9 and 10, doubles, Pletz and R. Roberts, Scheitlin and Davis.

What you don't owe won't hurt you.

pany for winners in various events and also for prize money placed in the pot by the players themselves.

In a recapitulation of entries at the Recreation Office early last week it was found that there are 20 teams entered in the tournament, 28 doubles combinations will vie for honors and 52 will compete for individual honors.

Play Starts Saturday Afternoon

The lid will be pried off the event at 1 o'clock Saturday afternoon when team competition will be launched. The Hornets and Orphans will be the first two teams to take the hardwood on Alleys 7 and 8 with the Materializers and Misfits playing at the same hour on Alleys 9 and 10. Team play will continue throughout the afternoon and night with the last teams scheduled to begin activities at 8 o'clock.

Singles and doubles play will be staged Sunday, beginning at noon and continuing until 9 p.m.

All members of teams finishing first and second in both handicap and scratch scoring will receive trophies. Each member of the doubles teams with the highest handicap and scratch scoring will receive trophies as will bowlers rolling high handicap and scratch single games. First and second place in all events scores, both handicap and scratch, also will be awarded trophies. Regular seasonal handicaps for all players will prevail in the tournament.

Of the 20 teams entered, 19 are from the 28 teams that have played regularly in the three plant leagues this season. This is an exceptionally high percentage, particularly as many of them competed recently in the Carbide tournament a few weeks ago. The 20th team entered is the Misfits, a pickup aggregation.

Tournament Schedule is Drawn

The tournament schedule was drawn by the Recreation Office with preference given whenever possible to shift workers and others whose hours of work limited them to competition at certain times. All bowlers entered in the event are urged to check closely with the published schedule and if anything arises that will prevent them from playing at the prescribed hour the affected players are asked to communicate with the Recreation Office, North Portal, telephone 7-8252, as soon as possible.

Keglerettes Of ORNL Defeat Y-12ers, Although Outscored

Although outscoring the league-leading Oak Ridge National Laboratory keglerettes in total pinage, the Y-12 women's varsity bowlers dropped two out of three games to the ORNL lassies last Thursday night at the Oak Terrace. The loss seriously gummed up hopes of the Y-12ers to land in the first division after their fine showing in recent weeks as time is about running out on them.

The Y-12ers got away winging with a 749 to 710 victory in the opening game but the ORNL women came back strong to eke out a 788 to 741 win in the second game and 702 to 680 triumph in the final. The total scores were 2,215 for Y-12 and 2,200 for ORNL.

Olyne Poindexter led the losers with a 505 series composed of games of 165, 162 and 178. Following her were Margaret O'Neal with 185, 132, 124-441; Daisy Ward 157, 143, 138-438; Ruth Law 157, 150, 129-433 and Katie Williams 126, 140, 111-377.

Traffic Officer: "When I saw you come around the curve, I said to myself 'Forty-five at least.'"

Woman Driver: "Well, you're wrong. This hat just makes me look old."

A wife with horse sense never becomes a nag.

SPORTS NEWS IN Y-12

Spring Finally Arrives At Y-12—Baseball And Softball Players Are Called For Practice And Organizational Meetings This Week

According to the calendar Spring arrived March 21—but not to the dyed-in-the-wool baseball fans of Y-12. There is no spring to this gentry before balls, bats and gloves spring into action. So Y-12 Recreation Supervisor Arnold Tiller—heeding the warming weather of last Friday—issued the first diamond calls of the season.

According to present plans Y-12 will be represented by a varsity baseball team to perform in the Oak Ridge City League, a men's softball team to play in the city Class B League and a women's varsity softball team to play in a city league and a plant softball league.

The baseball players will get their first workout of the season at 5:30 p.m. Friday at Oakwood Field,

No. 1, the main ball grounds of the city. Every male employee of Y-12 wanting to try out for the team is urged to be present for the first workout.

Meanwhile softball enthusiasts of the plant are asked to meet in the Recreation Office, North Portal at 3 o'clock Thursday afternoon when prospects will be discussed for fielding a plant team and also organizing a plant loop. Of course, all softball players are invited to this meeting to present their views.

Positions of managers and coaches for the plant teams, both baseball and men's and women's softball, must be filled and any Y-12er wishing to be considered for such posts are urged to communicate with Recreation Supervisor Tiller at the Recreation Office.



THIS AGGREGATION OF Y-12 FEMINE BOWLERS WILL be out there pitching tonight in the closing clashes of the W League. They are the Kemps, now in second place and just one game behind the first-place Controllers, who they meet in a crucial battle on which the league leadership and second-half race title depends. The Kemps, from left, are Wanda McCord, Katherine Hoskins, Evelyn Tucker, Mozelle Kennedy and Desma Hutcheson.

Controllers And Kemps Will Meet For W League Round Title Tonight

The second half and possibly the entire seasonal championship in the W League of plant women bowlers will be at stake tonight when the Controllers, present loop leaders, meet the Kemps in a crucial engagement that will wind up the final period of play in the league.

The Kemps, in second place and just one game behind the Controllers, must take at least two out of three games to stay in the running. A two-game victory for the Kemps would put the two teams in a tie while a three-game whitewash would give the Kemps the second half title.

Controllers Win First Half

However, if the Controllers can take as many as two games tonight on the Jefferson alleys, where play begins at 6 o'clock, they will be crowned champions for the entire season as they took first place in the first half of the season.

The Kemps advanced to their challenging position last Wednesday night by soaking the Hi Balls for three straight games, eliminating the Hi Balls from any chance at the second-half crown. The victors were in rare form and took all team scoring honors as Katherine Hoskins led her mates to their triumph by leading the field in individual scoring.

The Kemps rolled a fine 2,929 handicap series, high for the second round and topping their previous record of 2,915. They also got a 740 scratch game, 1,007 handicap game and 2,131 scratch series.

Katherine Hoskins Rolls High

Katherine Hoskins rolled a neat 202 scratch single game, tying the previous second-round record, built it up to 252 with handicap and then went on to roll a 502 scratch series and 652 handicap series.

Meanwhile the Controllers missed a chance to practically sew up the loop race by allowing the Dodgers

to rack up one win as the league leaders got a pair of victories. In other league contests the two tail end teams turned in triumphs, the Rattlers taking a pair from the Pick Ups and the Spinners whitewashing the Woes with three wins.

League standing follows:

Team	W	L	Team	W	L
Controllers	27	12	Dodgers	20	19
Kemps	26	13	Pick Ups	17	22
Hi Balls	24	15	Rattlers	15	24
Woes	21	18	Spinners	6	33

Y-12, Delicatessen Keglers Evenly Divide Alley Clashes

Falling off a bit from the form they had shown in two previous Oak Ridge City League appearances, the Y-12 men's varsity bowling team was only able to break even with the Grove Delicatessen keggers March 27 at the Oak Terrace. The Y-12ers won two out of three games but were sliced by the sausage boys for one game and total score. Y-12 took the first game 841 to 794, were badly beaten in the second by 921 to 804 but rallied to take the final clash by 850 to 835. The total pinage for Y-12 was 2,415 to 2,550 for Grove Delicatessen.

Only two Y-12 bowlers managed to climb over the 500 series mark in the clash. They were Conrad Roberts with 214, 171, 178-563; and Ernie Cobble with 180, 150, 183-513. Other Y-12 scores were Elmore Koons 153, 155, 170-478; Frank Gragg 146, 171, 157-474; and Nelson Tibbatts, 148, 157, 162-467.

More Sport News On Page Four

Golfers Elect W. M. Reynolds Loop President

Golfers of Y-12 elected W. M. Reynolds, one of the most enthusiastic followers of the sport in the plant, as president of the Y-12 Golf League for the coming season at an organizational meeting last Thursday. A constitution and by-laws for operation of the loop were adopted by the golfers and play in the league will get under way Monday, April 17.

Other officers elected to serve the league were Elmer Olson, vice-president; and Arnold Tiller, secretary-treasurer. E. C. Cain was named league match-maker and a protest board was formed consisting of Cain, Joe White and K. B. Brown.

Following the organizational meeting golfers throughout the plant began forming the four-man teams that will compose the circuit this year. The deadline for forming teams and submitting names of members and the team name to the Recreation Office is Friday, April 17.

After this date a league schedule will be prepared for the season and first round matches announced in The Bulletin April 12. Matches will be played once weekly.

Orphans Widen Gap In C Bowling League

Despite the fact that they had wrapped up the loop championship for the season one week previously, the Orphans keggers of the C League continued their rampaging on the Central alleys last Wednesday night by whitewashing the third-place Hornets for four points. The second-place Hooks vainly tried to keep apace of the leaders as they could take but three from the Moles and the Orphans boasted of a 10-point lead in the loop with alley activities closing this week.

The sixth and seventh place teams in the league succeeded in tightening the race slightly by turning in victories. The Hurricanes walloped the Short Circuits for three points and the Thin Pins had a similar margin over the Guards.

The Orphans ran away with all team scoring honors, starting out with a 810 scratch game, boosted to 981 with handicap, 2,358 scratch series and 2,871 series with handicap. E. B. Galloway, of the Hooks, scored the best scratch single game of the night with 186 and was tied with Joe Dunlap, of the Orphans, with a 497 scratch series. In handicap scoring Jim Charles, of the Thin Pins, posted a 226 game and 635 series.

League standing follows:

Team	W	L	Team	W	L
Orphans	40	12	Short Circuits	24	28
Hooks	30	22	Hurricanes	23	29
Hornets	27	25	Thin Pins	20	32
Guards	25	27	Moles	19	33

A lie can travel around the world and back again while the truth is lacing up its boots.

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ALTHOUGH THE SEASON FOR HUNTING BRER' RABBIT in Tennessee now is closed, a few of the boys from the Product Chemical Department enjoyed a rabbit hunt near Jefferson City when the sport was legal. Pictured above are R. Y. Drumwright, Garland McGhee, Jim Patterson and Al Townsend with Howard McGraw making the picture. "Sharpshooter" Patterson is credited with killing the bunnies before the others could even load their guns.

Robins Finish Third In Knox Tournament Play

The Y-12 Robins pulled up to third place in the Southern Appalachian basketball tournament's Class A women's division last week in the round robin play that saw Roane-Anderson take top honors and Pepsi-Cola, of Knoxville, second place. The Y-12 lassies tried hard, but dropped a 26 to 18 decision to Pepsi after trimming Oak Ridge National Laboratory by 19 to 18 to remain in the running for runner-up position.

The Robins wound up their season with the Pepsi-Cola clash and can well be proud of the record established over the long schedule. In every game the Y-12ers played sound, hard basketball and were never licked until the last whistle was tooted.

Car Condition Needs Spring Safety Check

Spring means housecleaning time to the housewife, but to the man of the house it should mean a safety checkup of the family automobile.

The National Safety Council says that poor vehicle condition is one cause of traffic accidents that could be completely eliminated.

Vehicles in need of mechanical repairs were involved in 13 per cent of all fatal accidents in 1948, the last year for which the Council has complete figures. This means that in about 3,700 accidents killing one or more persons an unsafe vehicle was involved.

Traffic experts estimate that about one out of every three cars on the highway today need repairs.

Brakes, lights and tires are the most important points for spring checkup. Brakes should take hold promptly and evenly, while the pedal is two or three inches above the floorboard. Lights should be aimed correctly, and tail and stop lights should be working and clear of mud.

Other safety check points are steering, windshield wipers, horn, window glass and muffler.

Maintenance Mauls Mules To Boost Lead

The Maintenance keglers of the B League widened their first place margin last week by kicking the Mules for a four-point whitewash while the second-place Rippers could only get three points from the Tigers. The Maintenance lads now have a four-point lead in the league.

The Bumpers kept on the heels of the Rippers by taking three from the Cubs. The Head Pins walloped the One-91 bowlers for three and the Wolves and Comets whitewashed the All Stars and Bums respectively in other contests.

Individual scoring honors were split four ways. Duncan, of the Rippers, had the best scratch game with 209. Dunlap, rolling for Maintenance, posted a 557 scratch series but Hasse, of the Cubs, had the best handicap series of 634. The best handicap single game was posted by McGill, of the Bumpers, who scored a 238.

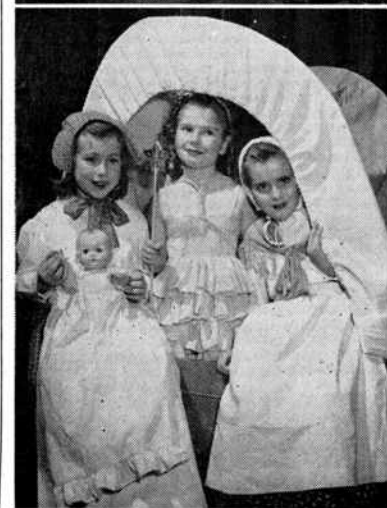
The Rippers and Wolves split team honors, the former having a 890 scratch game and 1,019 handicap game. The Wolves has a 2,554 scratch series and 2,948 handicap series.

League standing follows:

Team	W	L	Team	W	L
Maintenance	24	4	Head Pins	13	15
Rippers	20	8	Wolves	13	15
Bumpers	19	9	Comets	11	17
Tigers	15	13	One-91	9	19
All Stars	14	14	Cubs	9	19
Mules	13	15	Bums	8	20

'Pencil Point' Work Of Canadians Hailed

The Ottawa Journal has revealed that Canadian atomic scientists at Chalk River, the dominion's giant atomic plant, have developed a "pencil point" concentration of radio-active material that is the admiration of the scientific world and which will make notable contributions to industry. The Journal notes that Canadians have proved that a heavy water pile can be operated with unique efficiency and observed that the best concentration of Cobalt 60 in the United States atomic plants has been about the size of an apple as compared to the "pencil point" concentration achieved by the Canadian scientists.



Darby's Pickups Do Right Well In Tournaments

Frank "Father Time" Darby, who coached the Y-12 men's varsity basketball team in the recently closed season, couldn't get the bug out of his system even when the regular Y-12 team was disbanded. So when the Southern Appalachian tournament was held in Knoxville Darby assembled some of his Y-12 players, added some other Oak Ridge stars and entered the Knoxville event under the colors of the Central Service Station of Oak Ridge.

Players who performed for the Y-12 varsity during the season who joined the Darby squad included Oliphant, Claxton, Babb, Robertson and Dance. Others were Vaughn, of ORNL; Taylor, of Southern Bell and Baxter and Muckenthaler, of Fairchild.

These lads did right well for themselves, going to the finals in the Knoxville event, losing to Reliable Motors Friday night. Then, believe it or not, after being defeated in Knoxville in a game that started at 8 o'clock, the Ridgers piled in automobiles and traveled to Oliver Springs to play in the American Legion tournament there at 11 o'clock. However, the job of playing two games in one night, plus the long ride, was too much and the Darbymen were trimmed in a semi-final clash by the Cherokee Lakers, composed of Carson-Newman College players.

AEC Gives Report On Distribution

In its recent progress report on radioisotope distribution activities the Atomic Energy Commission has revealed the vast extent of the program. It states that valuable by-products are being shipped to more than 300 universities, hospitals and research laboratories in 41 states and territories. A total of 150 institutions in 21 foreign countries also have received isotopes for research purposes. More than 7,000 such shipments have been made in the past three years, the AEC report says.

'DOOM' HELD NONSENSE

The New York World Telegram and Sun has quoted military and scientific sources in Washington as saying privately that recent stories to the effect that the hydrogen bomb will doom mankind are sheer nonsense.

6-1188 Y-12 Photos By Vince Moore
HERE ARE SOME PICTURES OF A PAGEANT ON PIONEERS and transportation given by second-grade children at the Highland View School recently, the cast including some youngsters of present and former Y-12ers. At top left some of the youngsters and their mothers and teachers discuss and make costumes for the pageant. In front are Kathleen Kidd, daughter of Mrs. Carl Kidd, former Y-12er; Mrs. Arthur Pierce, whose husband is with the Y-12 Guard Department; Carolyn Pierce, Bill Rampley, Mrs. Leon Rampley, Judith Schaefer, daughter of Robert J. Schaefer, of the Maintenance Shops Department; and Mrs. Schaefer. In the back row are Mrs. Jessie L. Caldwell, Mrs. Leonard K. Doyle, mothers of other youngsters in the class; and Mrs. Inez King, teacher of the class. At top right is shown a stage view of the pageant with a covered wagon made by the class in the background. The big audience of enthusiastic children that watched the pageant is shown at lower right. At left are Judith Schaefer, Carolyn Pierce and Kathleen Kidd in the covered wagon and wearing the costumes they donned in the performance.

Children Of Y-12ers Given Lead Roles In Second Grade Pageant

Some youngsters of Y-12 parents and former Y-12ers were among the ambitious group in the second grade class of Mrs. Inez King at the Highland View School that recently presented a pageant of their own on the subject of transportation. The participating youngsters included Judith Schaefer, daughter of Robert J. Schaefer, of the Maintenance Shops Department; Carolyn Pierce, daughter of Arthur Pierce, of the Guard Department; and Kathleen Kidd, daughter of Mrs. Carl Kidd, a former Y-12er.

Covered Wagon Is Built

The whole idea was conceived by the second graders after Mrs. King had read a story to the youngsters about pioneers and their families who traveled across the country in covered wagons. Immediately the children wanted to build a covered wagon in their room, which was done as an art project in the training program.

A simple dramatic play staged in the covered wagon then led to the idea of a program about pioneers. The setting was laid in a forest where families of three pioneer families were camping in the year 1750. At night they played

Gadget 'Puts Finger' On Bit Of Beryllium Mixed In Stone

In a recent issue of Newsweek magazine Prof. A. M. Gaudin, director of the mineral engineering laboratory for the Massachusetts Institute of Technology, describes a gadget for separation of bits of beryllium ore from crushed granite. Developed under an Atomic Energy Commission contract, Gaudin's beryllium picker probably is the most ingenious application to date of beryllium's peculiar sensitivity to X-Rays, also known as gamma rays. When an X-Ray hits a beryllium atom sufficiently hard, it knocks a neutron out of the atomic nucleus. The MIT scientists aimed a steady stream of X-Rays down at a conveyor belt. Underneath they put an instrument somewhat like a Geiger counter. Every time a neutron was dislodged from a piece of beryl passing by, the counter pulled the trigger on an electronic machine that flicked a mechanical finger that would nudge the piece of beryl down a chute at one side.

LESSON IN FUCHS CASE

In an editorial the Washington Star thinks that the lesson in the Fuchs case is that no Communist anywhere may be regarded as anything less than a potential traitor.

games, told riddles and homespun poems. Of course, there were Indians, but the appearance of two fairies was rather unexpected.

Fairy Gives Look To Future

However, the fairies showed the pioneers how the world would travel in 1950 and how children of 1950 would study about the pioneers. The fairy of 1950, played by Carolyn Pierce, revealed the future to the pioneers with the help of movies and slide projector.

Judith Schaefer and Kathleen Kidd were cast as wives of two of the pioneers and the youngsters were aided in making of their costumes by a group of mothers, including those of the participating children.

The pageant was presented in the school auditorium and drew a packed house.

Ventilating Systems Are Valuable To Plant

Ventilating ducts, fans, exhausts and other mechanical ventilating equipment not only help make the Y-12 plant a more comfortable place in which to work, but by removing harmful vapors, fumes or dusts from the air, also help to make it a safe place as well.

Don't "Fool" With Controls

Ventilating systems are designed and engineered to operate in a particular way, so don't "fool" with the controls, turn off fans, change louver settings or make other adjustments unless instructed to do so. However, report all ventilating defects, loose fan belts, leaks or other faulty operations to supervision as soon as they are noted. An unusually strong solvent odor, for instance, may indicate such a condition. Failure to report it promptly may result in the escape of enough solvent vapors to result in injuries to personnel.

For small or occasional solvent jobs, the ventilating system may be one that is operated only while work is being done. In such cases be sure to turn the ventilation on, or check to see that it is on, before starting a job. Remove any packing cases, equipment or other objects that block the exhaust hood or fan and interfere with the flow of air.

Check If Anything Wrong
If there is any indication that there is something wrong with the equipment, don't start the job until checking with your foreman or supervisor.

There is nothing harder on a woman's clothes than another woman.